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EXAMINER

MARMOR II, CHARLES ALAN

ART UNIT PAPER NUMBER

3736

DATE MAILED: 10/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/977,019

Applicant(s)

EDWARDS ET AL.

Examiner

Charles A. Marmor, II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 14, 16-20, 22-32, 34, 35, 37-41, 43-47 and 49-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-47, 50 and 52-57 is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 17, 19, 20, 22-32, 34, 35, 37-41 and 43 is/are rejected.
- 7) ☒ Claim(s) 14, 16, 18, 49 and 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed July 28, 2003. The Examiner acknowledges the amendments to the specification; the amendments to the drawings; the amendments to claims 1, 11, 16-20, 22, 32, 37-41, 44-46, 49 and 54; and the cancellation of claims 12, 15, 21, 33, 36, 42 and 48. Claims 1-11, 13, 14, 16-20, 22-32, 34, 35, 37-41, 43-47 and 49-57 are pending.

#### ***Drawings***

2. The drawings were received on July 28, 2003. These corrected drawings are approved by the Examiner.

#### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities:
- a. In line 15, --, and-- apparently should be inserted following "stimulus".
  - b. In line 17, "to cause the device to generate a" apparently should read  
--producing a subsequent--.

Appropriate correction is required.

4. Claim 17 is objected to because of the following informalities: in lines 2 and 4, "test" apparently should read --convergent process--. Appropriate correction is required.

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5. Claim 22 is objected to because of the following informalities:

- a. In line 5, “,” apparently should be deleted.
- b. In line 19, “to cause the device to generate a” apparently should read  
--producing a subsequent--.

Appropriate correction is required.

6. Claim 49 is objected to because of the following informalities: in line 4, “to cause the device to generate a” apparently should read --producing a subsequent--. Appropriate correction is required.

7. Claim 51 is objected to because of the following informalities: in lines 2 and 3, “test” apparently should read --convergent process--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 22-32, 34, 35, 37-41 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "the user's" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim. There is no user recited in the claim prior to this recitation. Furthermore, it is unclear whether or not the user is the same individual the subject.

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Claim 22 recites the limitation "said base line threshold" in line 17. There is insufficient antecedent basis for this limitation in the claim. There is no base line threshold recited in the claim prior to this recitation.

Further regarding claim 22, it is unclear whether "the response" recited in line 20 is intended to refer to the "response to said base line threshold" recited in line 17 of the claim or the "choice" made by the subject in line 14 of the claim.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-11, 13, 17, 19, 20, 22-32, 34, 38, 40, 41 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Hou ('988). Hou teaches a method and system for on-line hearing examination using a calibrated local machine. The system allows a hearing test to be conducted using a computer program by establishing a communication channel between a remote device and a server in a communication network; executing a first component of the computer program at the server and executing a second component of the computer program at the remote device. The computer program is a routine that manages interaction via an interface on the remote device and adaptively selects stimuli based on the interaction to be produced at the

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remote device for the interaction according to a convergent process to determine a hearing characteristic. The server may include a data processor, a communication interface coupled to the data processor, and a memory coupled to the data processor. The communication network may comprise a network executing according to a standard internet protocol. The channel may be a connection according to (TCP/IP), a link through a cellular telephone network or a pager network. The remote device may be a mobile phone, a home computer, or a hand-held computing platform. The interaction includes a two-alternative forced choice interaction and the convergent process includes a staircase function. A visual effect is provided at the device on a graphical user interface corresponding to each of the stimulus intervals and the subject is prompted to make a choice by selecting a visual effect indicating the user's perception of the stimulus during the stimulus intervals. A first stimulus is selected in response to a baseline threshold. Subsequent stimuli are reduced or increased in magnitude by a step amount if the interaction identifies a correct interval 1 time or an incorrect interval 1 time, respectively.

***Allowable Subject Matter***

12. Claims 14, 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 35, 37 and 39 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. Claims 44-47 and 49-57 are allowable over the prior art of record.

15. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 14, 35, 44-47 and 49-57, no prior art of record teach or fairly suggest methods or apparatus, as claimed by Applicant in claims 1, 22 or 44, where stimuli are adaptively selected based upon the interaction according to a convergent, maximum likelihood process.

Regarding claims 16, 18, 37 and 39, no prior art of record teach or fairly suggest methods or apparatus, as claimed by Applicant in claims 1 or 22, where subsequent stimuli are reduced in magnitude by a step amount if the choice in the interaction identifies a correct interval 3 times.

### ***Response to Arguments***

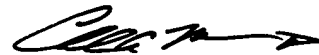
16. Applicant's arguments with respect to claims 1-11, 13, 17, 19, 20, 22-32, 34, 38, 40, 41 and 43 have been considered but are moot in view of the new ground(s) of rejection. Applicant contends that neither Menzel et al. nor Naidoo teach or suggest an N-alternative-forced choice adaptive algorithm for a hearing test, where a next stimulus in the procedure is selected based on responses to more than one previous stimulus. This argument is moot in view of the new grounds of rejection citing Hou ('988) set forth hereinabove.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Charles A. Marmor, II  
Primary Examiner  
Art Unit 3736

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October 16, 2003